

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 2063012111	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/EP 03/11505	International filing date ( <i>day/month/year</i> ) 17.10.2003	Priority date ( <i>day/month/year</i> ) 11.02.2003
International Patent Classification (IPC) or both national classification and IPC C08G65/00		
Applicant BASF CORPORATION et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 8 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of    sheets.

3. This report contains indications relating to the following items:

- I    ☒ Basis of the opinion
- II   ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☒ Lack of unity of invention
- V   ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  29.04.2004	Date of completion of this report  21.07.2004
Name and mailing address of the international preliminary examining authority:  <div style="display: flex; align-items: center;"> <div>             European Patent Office              D-80298 Munich              Tel. +49 89 2399 - 0 Tx: 523656 epmu d              Fax: +49 89 2399 - 4465           </div> </div>	Authorized Officer  Glomm, B  Telephone No. +49 89 2399-7158



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**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*):

**Description, Pages**

1-14 as originally filed

**Claims, Numbers**

1-40 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

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**IV. Lack of unity of invention**

1. In response to the invitation to restrict or pay additional fees, the applicant has:

- ☐ restricted the claims.
- ☒ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
- ☐ not complied with for the following reasons:

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☒ all parts.
- ☐ the parts relating to claims Nos. .

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-40
Inventive step (IS)	Yes: Claims	
	No: Claims	1-40
Industrial applicability (IA)	Yes: Claims	1-40
	No: Claims	

2. Citations and explanations

**see separate sheet**

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**VI. Certain documents cited**

1. Certain published documents (Rule 70.10)

and /or

2. Non-written disclosures (Rule 70.9)

**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

**see separate sheet**

Relevant documents:

- D1: US-B-6 362 1261 (GROSCH GEORG HEINRICH ET AL) 26 March 2002 (2002-03-26)
- D2: EP-A-0 589 635 (ARCO CHEM TECH) 30 March 1994 (1994-03-30)
- D3: DE 199 53 546 A (BAYER AG) 10 May 2001 (2001-05-10)
- D4: US-A-5 099 075 (REISCH JOHN W ET AL) 24 March 1992 (1992-03-24)
- D5: WO 01/04180 A (DOW CHEMICAL CO) 18 January 2001 (2001-01-18)
- D6: US-A-3 900 518 (MILGROM JACK) 19 August 1975 (1975-08-19)
- D7: WO 03/076488 A (BASF AG ; BOHRES EDWARD (DE); HARRE KATHRIN (DE); BAUM EVA (DE); RUPPE) 18 September 2003 (2003-09-18)
- D8: WO 02/081423 A (BOCHNITSCHKE WERNER ; GROSCH GEORG HEINRICH (DE); ZIRNSTEIN MICHAEL (D) 17 October 2002 (2002-10-17)
- D9: DE 100 01 779 A (BASF AG) 19 July 2001 (2001-07-19)
- D10: DE 199 49 092 A (BASF AG) 19 April 2001 (2001-04-19)
- D11: DE 198 40 846 A (BASF AG) 9 March 2000 (2000-03-09)
- D12: US-B-6 303 5331 (GROSCH GEORG HEINRICH ET AL) 16 October 2001 (2001-10-16)

**1. Unity (Art. 3, section 4, item (iii) PCT)**

The International Preliminary Examining Authority agrees with the objection put forward by the International Search Authority as to lack of unity (Article 3, section 4, item (iii) PCT), the reasons for the objection being as follows:

The present application covers totally three inventions I to III corresponding to the following groups of claims:

Invention I: claims 1 to 19 and 30 to 40 corresponding to a method for removal of a double metal cyanide catalyst based on addition of a polymeric acid;

Invention II: claims 20 and 21 corresponding to a method for removal of a double metal cyanide catalyst based on addition of a polymeric amine;

Invention III: claims 22 to 29 corresponding to a method for removal of a multi metal cyanide catalyst based on addition of an adsorbent.

The only group of features which is shared by these three groups of claims is the presence of a polyol and a metal cyanide catalyst. This "concept" is, however, clearly anticipated by each of the above cited prior art documents D1 or D2 (see the considerations in section 2. below).

Any common, novel and inventive concept linking together the independent claims according to said four inventions I to III is therefore not recognizable. Consequently, the present application lacks unity .

In the European regional stage, if any, the applicant will be asked to state upon which invention further prosecution of this application should be based and to limit the application accordingly. Subsequently, other inventions are to be excised from the claims, description and drawings. The subject-matter to be excised may be made the subject of one or more divisional applications.

## **2. Novelty (Art. 33 (2) PCT)**

Each of documents D1 or D2 discloses a method for removal and reclamation of a double metal cyanide catalyst from a polyol as specified in detail in present main claim 1 (see D1, col. 2, l. 6 to col. 4, l. 59; working examples 1 to 37; claims 1 to 16 and abstract; see D2, p. 2, l. 50 to p. 3, l. 53; working examples 1 to 15; claims 1 to 11 and abstract, respectively. For any further relevant passages, see the corresponding International Search Report in detail).

Consequently, each of documents D1 or D2 anticipates the subject matter of present claim 1.

The same considerations also relate to the additional features of the present claims 2 to 19 and 30 to 40, when taking into account the full disclosure of each of documents D1 or D2. Furthermore, similar considerations also relate to the additional features of the present claims 20 and 21, when taking into account the full disclosure of each of documents D5 or D6. Furthermore, similar considerations also relate to the additional features of the present claims 22 to 29, when taking into account the full disclosure of each of documents D8 to D12, respectively.

**Therefore the subject matter of present application is not new in view of the disclosure of each of documents D1 or D2 (= invention I), documents D5 or D6 (= invention II) and documents D8 to 12 (= invention III), respectively.**

### **3. Inventive Step (Art. 33 (3) PCT)**

In view of the above objection, the discussion of the presence of an inventive step is postponed to a later stage of the examination. Providing an amended main claim which meets the requirements of Art. 33 (2) PCT, the applicant should relate the distinguishing feature to a surprising (unexpected) technical effect or make credible or plausible that the distinguishing feature is not derivable from the prior art teaching (Art. 33 (3) PCT).

### **4. Miscellaneous**

In order to support the understanding and legibility of the claimed subject

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matter, the document D3 should be identified in the description additionally in the European regional stage, if any, and the relevant background art disclosed therein should be briefly discussed.

The attention of the applicant is drawn to the fact, that document D7 will be relevant for the assessment of novelty in regard to the subject matter of invention III under the Arts. 54 (3, 4) EPC in the subsequent European regional stage, if any.

When filing amendments, any undue extension of the scope of the application should be avoided.